PROPOSAL FOR USEPA'S COMMUNITY-WIDE BROWNFIELDS ASSESSMENT GRANT
RFP NO. EPA-OLEM-OBLR-21-04/ CFDA NO. 66.818
Section IV.D. – Narrative Information Sheet
December 1, 2021

1. Applicant Identification

   County of Shenandoah, Virginia
   600 North Main Street Suite 102
   Woodstock, VA 22664-1855

2. Funding Requested
   a. Assessment Grant Type: Community-wide
   b. Federal Funds Requested:
      i. $500,000
      ii. N/A – Not Site Specific

3. Location:
   Shenandoah County, VA
   Town of Mt Jackson, VA
   Town New Market, VA
   Town of Strasburg, VA

4. Target Area and Priority Site/Property Information:
   • Target Area and Census Tract/Town/City of Target Area

<table>
<thead>
<tr>
<th>Target Area</th>
<th>Town / Census Blocks</th>
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</thead>
<tbody>
<tr>
<td>Town of Mt Jackson</td>
<td>Mt Jackson, VA</td>
</tr>
<tr>
<td>Town New Market</td>
<td>New Market, VA</td>
</tr>
<tr>
<td>Town of Strasburg</td>
<td>Strasburg, VA</td>
</tr>
</tbody>
</table>
• **Addresses of Priority Site(s)**
  1. Former Triplett High School, 6044 Main Street, Mt. Jackson, VA 22842
  2. Sunny Side Dairy, Latitude/Longitude: 38.646328524656965, -78.66905473960331
  3. Bordon Lumber Storefronts, 385 E. King Street, Strasburg, VA 22657
  4. Rails to Trails, Latitude/Longitude: 38.720099263502256, -78.66402926260731

5. **Contacts**
   a. **Project Director / AOR**
      Jeanna French, Director of Tourism & Economic Development
      Shenandoah County
      600 North Main Street, Suite 101
      Woodstock, VA 22664-1855
      Phone: 540-459-1822
      E-mail: jfrench@shenandoahcountyva.us
   
   b. **Chief Executive/Highest Ranking Elected Official**
      Dick Neese, Chairman
      Shenandoah County Board of Supervisors
      600 North Main Street, Suite 102
      Woodstock, VA 22664-1855
      Phone: 540-459-6165
      E-mail: district1@shenandoahcountyva.us

6. **Population:**
   - Shenandoah County: 44,186\(^1\)
   - Town of Mt Jackson, VA: 2,129\(^2\)
   - Town of New Market: 2,180\(^2\)
   - Town of Strasburg, VA: 6,609\(^2\)

\(^1\) US Census Bureau, 2020 Census Data
\(^2\) US Census Bureau, ACS 5-Year Estimates, 2015-2019
7. **Other Factors Checklist**

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<th>Other Factors</th>
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<tr>
<td>Community population is 10,000 or less.</td>
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<td>The applicant is, or will assist, a federally recognized Indian tribe or United States territory.</td>
<td></td>
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<td>The priority brownfield site(s) is impacted by mine-scarred land.</td>
<td></td>
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<tr>
<td>The priority site(s) is adjacent to a body of water (i.e., the border of the priority site(s) is contiguous or partially contiguous to the body of water, or would be contiguous or partially contiguous with a body of water but for a street, road, or other public thoroughfare separating them).</td>
<td></td>
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<tr>
<td>The priority site(s) is in a federally designated flood plain.</td>
<td></td>
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<tr>
<td>The reuse of the priority site(s) will facilitate renewable energy from wind, solar, or geothermal energy; <strong>OR</strong> will incorporate energy efficiency measures.</td>
<td></td>
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<td>30% or more of the overall project budget will be spent on eligible reuse/area-wide planning activities for priority brownfield site(s) within the target area(s).</td>
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<td>The target area(s) is located within a community in which a coal-fired power plant has recently closed (2011 or later) or is closing.</td>
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8. **Letter from the State Environmental Authority:**  Attached
November 9, 2021

Jenna French
Director of Tourism and Economic Development
Shenandoah County
600 North Main Street, Suite 101
Woodstock, VA 22664-1855

VIA ELECTRONIC MAIL

Subject: Acknowledgement and Support
USEPA’s Community Wide Brownfields Assessment Grant
EPA-OLEM-OBLR-21-04
Shenandoah County

Dear Ms. French:

The Virginia Department of Environmental Quality (DEQ) is in receipt of your request for support to the above referenced Brownfields Grant application. The request will be for a community-wide EPA Brownfields Assessment grant for Shenandoah County. We are thrilled to add our support for the subject EPA grant proposal.

It is our understanding that the target area includes the Town of Mt. Jackson, Town of New Market, and Town of Strasburg. DEQ realizes these grant funds are absolutely critical to moving sites forward and encouraging redevelopment. We have been working with EPA to encourage the use of Brownfields resources in this area and it’s great to see this application come forward. The DEQ Brownfields Program is pleased to provide our support for this grant proposal and if successful the grant funds will play a vital role in igniting revitalization and redevelopment efforts.

It is our sincere hope that the county will be able to leverage funds to stimulate economic development and revitalization within the target area. If I can be of further assistance, please don’t hesitate to call me at (804) 698-4064.
Acknowledgement and Support
USEPA’s Community Wide Brownfields Assessment Grant
EPA-OLEM-OBLR-21-04
Shenandoah County

Sincerely,

[Signature]

Vincent A. Maiden, CPG
Brownfields Program Coordinator

cc: Graham Simmerman – DEQ-VRO
Meade Anderson – DEQ - CO
Lisa Kitchens – Draper Aden
Shenandoah County, Virginia
Proposal of USEPA’s Community Wide Brownfields Assessment Grant
EPA-OLEM-OBLR-21-04 / CDFA No. 66.818
Section IV.E – Narrative Proposal / Ranking Criteria
December 1, 2021

1. PROJECT AREA DESCRIPTION AND PLANS FOR REVITALIZATION
1.a Target Area and Brownfields

1.a.i Background and Description of Target Area: The proposed project will cover Shenandoah County (County) with a focus on the Towns of Strasburg, Mt. Jackson, and New Market. The County is in the scenic Valley and Ridge geologic province of Virginia (VA) roughly 80 miles west of Washington, DC. Established in 1772, the County has witnessed many famed historical events, including the Battle of New Market and Sheridan’s March during the Civil War. Among the County’s first major industries were agriculture due to limestone-rich soils, and iron mining, milling, and smelting operations due to the abundance of iron ore, limestone, and timber in the County. The Baltimore and Ohio Railroad allowed the County to expand product supply outside the County, including to DC and Richmond. The railroad firmly established and connected the small towns that already existed along Old Valley Pike Road, a former Native American trail and then major turnpike connecting the towns from North to South since the eighteenth century. However, the major thoroughfare Interstate I-81 redirected traffic and transport away from the railroad and turnpike, drawing activity away from the towns. In addition, recent national and statewide trends away from manufacturing and towards professional and technical sectors\(^1\) have caused multiple companies in the County to close, resulting in thousands of jobs lost and a lack of new industries to support the County other than its mainstays of agriculture and tourism. Not surprisingly, over 60% of the County’s residents commute outside of the County for work, resulting in lost opportunities and local tax revenue. A subset of commuters exist who receive higher wages working in the DC region but live in the County, thus having an advantage in competing for affordable resources. This trend exacerbates the County’s economic challenges as higher incomes are reflected in lower poverty levels, but lower wage residents must compromise on necessities due to the high cost of living.

Given these issues, the target areas identified in this proposal were chosen to achieve the vision of directing growth in diverse, quality industries and workforce to the County’s towns while enhancing citizens’ quality of life. The three target areas – Strasburg, Mt. Jackson, and New Market - are small towns with less than 10,000 residents but with brownfields redevelopment opportunities that will have significant positive impacts, particularly on disadvantaged communities. Strasburg is the northernmost target area and known historically for pottery manufacturing and as a railroad service depot. This target area is closest to the DC metropolitan area and therefore attracts the most DC commuters with the unfortunate result of a lack of affordable housing due to stiff competition from more affluent people. Strasburg also now struggles as multiple major companies, including Aileen textiles in the 1990’s and most recently LSC Communications in 2020, have closed their doors, resulting in the loss of almost 600 jobs. Mt. Jackson was known as a mill and railroad town in the late nineteenth and early twentieth centuries but now struggles with low Median Household Incomes (MHIs 37% below State’s) and has a high population of Hispanics (30% of population) that are most likely a large portion of residents suffering from low MHIs.\(^1\) New Market is the southernmost target area and is particularly renowned for the Battle of New Market. It is also, however, the target area with the most struggles as it has the highest poverty rate (70% above the State’s rate) and lowest MHI (44% below the State’s) of the target areas.\(^1\) These target areas were strategically chosen to span the region to optimize redevelopment opportunities and to increase economic and social improvements across the entire County.

1.a.ii. Description of Priority Brownfield Sites: Shenandoah contains numerous brownfields across the County that are in need of assessments including 11 commercial sites in Strasburg with one being an

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\(^1\) United States Census Bureau. 2020 Census and 2019 ACS 5-year estimates [https://www.census.gov/acs/www/data/data-tables-and-tools/]
111-acre former quarry, 7 commercial properties in Mt. Jackson on mostly 1-acre lots, 5 commercial properties in New Market that range from 0.2 to 24 acres, and over 20 brownfields in the rest of the County ranging from commercial to industrial and 0.1- to 84-acre lots. The County is focusing on four priority brownfield sites from these options based on their likelihood of achieving their vision (growing quality industry and workforce, enhancing citizens’ quality of life), as well as addressing health and environmental issues and community needs. Borden’s Campus, known for the Borden Lumber and Hardware store, is a group of 8 buildings on a 3-acre lot in downtown Strasburg whose tenants currently include the hardware store and a co-working space. Strasburg has met with developers to discuss transforming the property into 33 affordable housing units, a community space, and facilities for upskilling classes/public education. However, its age and history as a laundry and tin shop, as well as being adjacent to a former rail line, suggest contaminants such as asbestos, lead paint, laundry chemicals, heavy metals, fossil fuels, and creosote, many of which are known carcinogens and can also lead to asthma and birth defects if inhaled. Assessments are needed before converting the property to residential and community space.

The Former Triplett Vocational High School (Triplett), which served as Mt. Jackson’s high school until 1992, was built in 1920, demolished in a fire, then rebuilt in 1925. Donated by Shenandoah County to the local fire and rescue in 1994, the school sits on the southern end of the downtown area and currently consists of a few classrooms and gymnasium on a 1.2-acre lot. The site was known as the local community gathering place until safety and environmental concerns such as lead-based paint and asbestos resulted in its closure to the public in 2016. Two inactive UST tanks and a 1993 petroleum release onsite are not only a risk to the adjacent disadvantaged neighborhood but also to the North Fork Shenandoah River, which sits 300 feet from the site and whose federally regulated flood plain sits 100 feet from the site. An informal community group is currently exploring resources to redevelop the buildings into a local YMCA given its fixture as the community center.

The former Sunny Side Dairy (Sunny Side) in New Market is a 24-acre field that was once a dairy farm and grazing pasture that operated from the 1940s until the 1970s. The major industry New Market Poultry recently purchased the site in anticipation of building a new, modern facility that would expand their production and that would move the current facility away from the heart of the commercial and residential districts of New Market. As part of its redevelopment, the industry also plans to offer social and health care support to its predominantly Hispanic workforce, including workforce training and English as a Second Language classes. Assessments are required though as the former pasture most likely has legacy nutrients and bacterial contamination onsite, which can pose health hazards from airborne particulates or through runoff to the neighboring communities or the nearby Smith Creek, which is a federally regulated flood plain and has caused flooding on the site. The resulting redevelopment with the help of EPA assessment funding would not only lead to a more efficient, environmentally friendly facility, increased jobs, and improved quality of life for its disadvantaged workforce, but it would alleviate local health issues by removing its current facilities that are adjacent to a primarily elderly neighborhood, which are more susceptible to airborne particulates from the processing plant.

Finally, the County has identified a 1.5-mile segment of former railroad track as its fourth priority site, which is to be converted to a Rails to Trails path (Rail Trail) near Mt. Jackson. In conjunction with efforts by adjacent Counties and the State for a Rail Trail path extending North and South through the entire County, this segment will join multiple public schools, tourist attractions such as the Shenandoah Caverns and historic downtown shopping and dining districts, and the Mt. Jackson Industrial Park. Redeveloping this segment will not only identify and remove any carcinogenic contaminants due to former railroad activity but will also act as leverage to complete the entire path, which will connect the target areas and increase traffic, businesses, and therefore revenue to these areas.

1.b. Revitalization of the Target Area

1.b.i. Reuse Strategy and Alignment with Revitalization Plans: The vision of growing diverse and quality businesses while enhancing quality of life and the reuse strategies for the priority sites directly match and address goals outlined in the 2016 Shenandoah County Comprehensive Plan and the 2019
Shenandoah County Strategic Economic Development Plan Update. These strategies also align with the County’s and Towns’ plans: Strasburg’s 2018 Comprehensive Plan includes ensuring availability of safe and healthy housing and fostering a healthy commercial environment as part of its goals. Mount Jackson’s 2017 Comprehensive Plan includes a vision to “support wellness of all generations through recreational, cultural, and educational activities”; and New Market’s 2010 Comprehensive Plan focuses on preserving the historic and residential district as a focal point for tourism while developing a more vibrant and robust economy with improved public services. The County plans to achieve revitalization plans through the following methods: growing tourism along with enhancing quality of life (Rail Trail, Triplett, Borden’s Campus); strengthening and expanding industries (Sunny Side); and educating the workforce (Borden’s campus, Sunny Side).

Redeveloping these sites will also address issues raised in the 2018 People’s Inc. Community Needs Assessment (PI CNA)\(^2\), the 2020 United Way of Northern Shenandoah Community Needs Assessment (UWNS CNA)\(^3\), and the 2019 Valley Health Community Health Needs Assessment (VH CHNA)\(^4\). Needs identified by these community needs assessments (CNAs) and that these priority sites fulfill include affordable housing (Borden’s Campus), community space for youth and elderly programs (Borden’s Campus, Triplett), and reducing poverty while advancing learning and career development (Sunny Side). In addition, the Rail Trail will promote physical and outdoor activity, promote “Safe Routes to School” for children, will be handicap accessible for the elderly, and can facilitate affordable outdoor programs for the youth and elderly. All of these reuse strategies will require Phase I and Phase II environmental site assessments (ESAs) at all priority sites to identify and address environmental risks at the site in order to inform redevelopment options.

1.b.ii Outcomes and Benefits of Reuse Strategy: Applying EPA funds to these priority and other brownfields sites will maximize economic and social benefits achieved at these sites. Multiple outcomes will be achieved, including the following: 1) approximately 55 acres of land made ready for reuse, 2) reduction of legacy pollution adjacent to disadvantaged communities, 3) additional jobs, 4) new industries and professional service sector training to replace former industries, 5) additional affordable housing, 6) opportunity to form youth and elderly programming, and 7) more outdoor resources. The benefits of these outcomes will have a major impact on the residents of the target areas and the surrounding communities, including the following: 1) lower poverty levels due to increased job and educational opportunities; 2) less financial stress; and 3) improved physical and mental health; and 4) a reduction of environmental disparities within disadvantaged communities through the correction of environmental injustices. Because all priority sites are located next to disadvantaged communities (see Section 2.a.ii.(3)), all of these communities will realize direct health benefits from removal of contaminants in addition to economic benefits.

1.c. Strategy for Leveraging Resources

1.c.i. Resources Needed for Site Reuse: Shenandoah fully anticipates the need to secure additional funding and assistance for assessment, revitalization, and redevelopment of their target areas and sites and has identified multiple resources for every stage of development that can be applied to all priority sites. The Virginia Brownfields Restoration and Assistance Fund (VBAF), which the County has secured before for a former bank building, provides funds up to $500,000 for assessment and remediation of brownfield sites. EPA Brownfields funds can be used as a match for the VBAF funds. If cleanup funds are required, the US EPA Brownfields Cleanup Grants of up to $500,000 can be used. The Community Development Block Grant (CDBG) Program, with which the County has also had experience, can be used for various revitalization efforts for affordable housing (Borden’s Campus) and community centers (Triplett). The VEDP Agriculture and Forestry Industries Development Fund can help with site or building construction of the new New Market Poultry facility. In addition, the Counties of Shenandoah, Warren, and Rockingham each invested $15,000 in the Rails to Trails project for appraisal and economic benefits.

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impact studies, and the Virginia Department of Conservation & Recreation can be a funding source for the Rail to Trails segment as they are actively seeking to transform former railroad properties in Rail Trails. A private local family in Mt Jackson has pledged $100,000 to the YMCA project in addition to possible CDBG funding. These funding sources clearly indicate the commitment of the County and involved parties to the success of these projects. The EPA Brownfields Assessment grant will be an important tool in this process with the potential to leverage additional funding from these programs and other resources for investment to revitalize these sites.

1.c.ii Use of Existing Infrastructure: The priority sites and other prospective sites in the target areas will use existing buildings, utility connections including sewer, water, electrical, and broadband, and roadways. Existing infrastructure will also be used as a prioritization criterion during the site selection process. Buildings will be reused and redeveloped at Borden’s Campus and the former Triplett School site. Sunny-Side Dairy and Rails to Trails do not have existing infrastructure, which makes them ideal for redevelopment: the Rails to Trails site does not require any buildings, and the dairy field is ideal for New Market Poultry to develop a modernized, efficient facility. Existing transportation and utility infrastructure are currently in place for the priority sites, which allows for utility extensions to other structures. If improvements or upgrades are needed to adapt sites for their intended uses, the County will facilitate upgrades where needed with the resources identified in Section 1.c.i.

2. PROJECT AREA DESCRIPTION AND PLANS FOR REVITALIZATION

2.a.i. Community Need

2.a.i. The Community’s Need for Funding: The proximity to the DC metropolitan area brings economic benefits but masks economic and social challenges. A story of economic discrepancies is revealed when comparing the State, County, and target area economic numbers. The County’s poverty rate is comparable to the State’s (11.5% vs. 10.6%), but target area New Market’s poverty rate is 18.0%, indicating pockets of community poverty. In the 2019-20 school year, 47% of public-school students were on a free or reduced-price lunch program, indicating lack of income for food. Over half the County earns more than $49,999, reflecting the large number of DC commuters that receive higher wages that increase the area’s MHI and lower poverty levels, but MHI for the County and target areas are still 77% or lower of the State’s MHI, indicating income discrepancies. Housing cost burdens are generally higher than the State’s – 43% or more of County and target area residents with an income below $50,000 spend over 30% of their income on homes or rentals. Housing Virginia reports it is because “higher income

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>US</th>
<th>VA</th>
<th>Shenandoah County</th>
<th>Mt. Jackson**</th>
<th>New Market**</th>
<th>Strasburg**</th>
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<tr>
<td>POPULATION*</td>
<td>331,449,281</td>
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<td>44,186</td>
<td>2,129</td>
<td>2,160</td>
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<tr>
<td>PERCENT UNDER 18*</td>
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<td>21.1%</td>
<td>25.5%</td>
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<td>PERCENT OVER 65</td>
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<td>PERCENT HISPANIC ORIGIN*</td>
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<td>MEDIAN HOUSEHOLD INCOME (MHI)</td>
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<td>PERCENT IN POVERTY (ALL PERSONS)</td>
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<td>10.6%</td>
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<td>12.5%</td>
<td>18.0%</td>
<td>10.4%</td>
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<tr>
<td>PERCENT HIGH SCHOOL DEGREE OR LESS</td>
<td>12.0%</td>
<td>10.3%</td>
<td>13.0%</td>
<td>23.0%</td>
<td>25.9%</td>
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<td>PERCENT RENT OCCUPIED</td>
<td>36.0%</td>
<td>33.7%</td>
<td>29.1%</td>
<td>38.8%</td>
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<td>&gt;50% INCOME FOR HOUSE OWNERSHIP (INCOME &lt; $49,999)</td>
<td>14.7%</td>
<td>12.5%</td>
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<td>21.8%</td>
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<td>19.8%</td>
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<td>&gt;50% INCOME FOR RENT (INCOME &lt; $49,999)</td>
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<td>8.2%</td>
<td>11.4%</td>
<td>13.4%</td>
<td>5.5%</td>
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2019 Census ACS 5-year estimate data except where footnoted
* 2020 Census data  ** Census data not available at town level. 2019 ACS 5-year estimate data provided
households occupy units affordable to lower income households.”6 Recent trends also show that investors not residing in the County are purchasing investment and vacation homes, further reducing available housing.

Within target areas, over 37% of residents are renting due to high costs of home ownership. These indicators demonstrate how, due to competition with higher wage earners for affordable resources, forty percent of County citizens are designated as Asset Limited, Income Constrained, Employed (ALICE), with incomes that are above the federal poverty level (e.g., $26,500 for a family of 4) but who struggle with the cost of living in the County. On top of these economic challenges, the County’s towns have small populations with consequent limited financial resources. All these factors offer a compelling reason why the County and the Towns have limited resources to address potential brownfield sites on their own. The EPA Assessment Grant will be a significant help in identifying whether environmental risks exist at priority sites. The County then has the information it needs to strategically utilize resources for redevelopment, which will ultimately improve the quality of life for its disadvantaged residents.

2.a.ii Threats to Sensitive Populations

(1) Health or Welfare of Sensitive Population: Each of the target areas has sensitive populations unique to the area but that all suggest pockets of significant disadvantage that are masked by affluence as shown by ACS data (Section 2.a.i. table) and EJSCREEN data. The sensitive population living adjacent to Triplett in Mt. Jackson is defined by Hispanics (30% of population) that are most likely living in poverty (74%ile in State for low income), linguistically isolated (79%ile in State), and have less than a high school education (78%ile in State). This demographic extends down into the Rails to Trails area as well. The population around Sunny Side has a high poverty rate (18% vs. 11% in the County) and is linguistically isolated (84%ile in State) with less than a high school education (84%ile in State), owing primarily to the Hispanic workers at New Market Poultry. The New Market downtown area adjacent to the poultry facility also has a high elderly population (95%ile in State). Strasburg, particularly around the Borden’s Campus site, has a high concentration of low-income residents (80%ile in State) with a high number of children under 5 years old (88%ile in State), indicating that there are a significant number of children in poverty. The disadvantaged children in Strasburg are only a subset of such children in Shenandoah – 46% of children in Shenandoah County are economically disadvantaged where families struggle to meet basic needs. Because of their unique challenges (e.g., linguistically isolated, less than high school education) that most likely result in low income circumstances, these sensitive populations do not have the means to resolve health issues and are therefore at particular risk of contaminant exposure around the priority and other brownfields sites within the target areas. The youth and elderly especially, because of their unique stage of development or degeneration of the body, respectively, are more vulnerable to environmental toxins and financial hardships. Redevelopment of the priority sites will resolve not only economic issues but also health issues by preventing contaminant exposure, as well as welfare issues including affordable housing and youth and elderly programming needs.

(2) Greater Than Normal Incidence of Disease and Adverse Health Conditions: Limited recent health data are available at the town or census tract level for the County’s target areas. However, the target areas comprise some of the most populated locations in the County; therefore, County-level health information capture similar issues found in these areas. The VH CHNA reports the cancer rate for the County was 21% greater than the state rate. The County also has chronic lower respiratory disease rates, which includes asthma, that are 11% greater than the state. CHR reports the County’s diabetes prevalence is 45% greater than the state rate. The VH CHNA further notes that 23% of respondents to the Spanish survey rated cancer, asthma, and diabetes as the most significant health problems versus

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6 Housing Virginia. 2018. Housing the Northern Shenandoah Valley.
12% of English survey respondents\(^4\), suggesting a higher prevalence of these diseases in the Hispanic population. The contaminants on or near the priority sites as described in Section 1.a.ii and Section 2.a.ii.(3) can contribute to higher rates of cancer (heavy metals and creosote from rail lines at Borden’s Campus and Rail Trail), respiratory disease (asbestos at Triplet), and birth defect rates (blue baby syndrome from high nitrates in water originating from Sunny Side Dairy). The health risks are even greater given the proximity of these priority sites to downtowns (Borden’s Campus, Triplet, Sunny Side), residences (Triplet, Sunny Side), and vulnerable populations (Rail Trail segment near public schools including an elementary school). Redevelopment of these sites will not only identify and remove contaminants, which can reduce cancer rates, asthma cases, and birth defects, but it can also help reduce diabetes (e.g., Rails to Trails promotes physical activity).

(3) Promoting Environmental Justice: EJSSCREEN’s environmental indicators only scratch at the surface of the environmental injustices prevalent in the target areas and near the priority sites. EJSSCREEN indicates a high risk of lead-based paint exposure near all the priority sites (+82%ile in State), thus exposing nearby disadvantaged communities to a known carcinogen; however, local injustices not captured by EJSSCREEN exist around the priority sites. Borden’s Campus is located in the midst of aged warehouse buildings, former railroad tracks, and industrial facilities with a history of petroleum spills. These conditions not only expose nearby low-income families with young children to possible heavy metals and carcinogens in soil and water runoff but result in depreciated property values. Triplet has been deteriorating for decades until its final closure in 2016 due to safety reasons including asbestos exposure, resulting in the loss of a main community gathering space. Only 200 feet of open field separate the railroad track that would become the Rail Trail with the local public schools, resulting in years of exposure to heavy metal particulates and creosote from the railroad. Virginia Department of Environmental Quality (VDEQ) databases list petroleum releases and a fugitive dust complaint at New Market Poultry properties, indications that its Hispanic workers and the nearby low-income, elderly population are exposed to particulates that exacerbate asthma and are possibly carcinogenic.

The grant will help to a large extent in evaluating priority and other brownfield sites within the target areas for environmental risks, such as conducting Phase II ESAs at all priority sites to determine if heavy metals, asbestos, lead-based paint, and other contaminants exist onsite in the soil or groundwater. Shenandoah can then mitigate the environmental risks during the redevelopment process, which will remove the disproportionate share of environmental risks to the nearby disadvantaged population (remediation at Borden’s Campus, Triplet, Rail Trail; move New Market Poultry away from downtown), and improve the communities through increased jobs, services, and property values. All of these actions will help rectify historical and ongoing environmental injustices in these target communities.

2.b. Community Engagement:

2.b.i. and 2.b.ii Project Involvement and Project Roles: Recognizing the importance of community involvement in the brownfields prioritization and redevelopment process, Shenandoah has identified partners that will support all stages of site selection and redevelopment. The County will establish a Shenandoah Brownfields Redevelopment Advisory Group (Shenandoah BRAG) that include governmental, social, and economic organizations with outreach capabilities to the target areas and disadvantaged communities. These representatives were chosen so that site selection, prioritization, and redevelopment can be informed by experts in fields that span economics, education, health, and community advocacy. The following Project Partners have committed to participating in the program:

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<thead>
<tr>
<th>Partner Name</th>
<th>Point of Contact/E-mail/Phone</th>
<th>Specific Role in Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shenandoah Industrial Development</td>
<td>Vincent E. Poling, IDA Director</td>
<td>Lead site selection and redevelopment efforts with representation from towns and local businesses within the Authority.</td>
</tr>
</tbody>
</table>
2.b.iii. Incorporating Community Input: The County will use a hybrid approach to communicate project progress and incorporate feedback from the local community in consideration of COVID-19 guidance. In-person and virtual meeting will be organized with consideration for different work schedules, and meetings will be advertised via the BRAG members and through the County’s website, social media, e-mail lists, local print, and fliers. In-person meetings will be organized at locations within the target areas with adherence to social distancing requirements as per COVID-19 guidelines. The County will also host virtual meetings and has been successful using this approach for the past year to reach out to the community. The County will solicit comments, recommendations for site selection and prioritization, and redevelopment/reuse planning ideas during in-person and virtual meetings as well as at local events and through online and e-mail surveys. Core stakeholder groups will be formed in each target area to include community organizations, property owners, businesses, and staff as well as relevant BRAG members. These stakeholder groups will act as the interface between the County, the BRAG, and the community to provide a means for dialog beyond formal meetings and to incorporate and respond in an intentional way to community input on site prioritization, site selection, and reuse planning. Partner organizations like Lord Fairfax Community College, Shenandoah County Public Schools, and United Way by their very structure can communicate and disseminate information directly to and act as representatives for the targeted communities. Due to the significant population of Hispanics in the target areas, all forms of media and meetings will be offered with bilingual options to better reach and serve all communities.

3. TASK DESCRIPTIONS, COST ESTIMATES, AND MEASURING PROGRESS

3.a. Description of Tasks/Activities and Outputs (Sections 3.a.i.-iv. outlined under each task)

Task 1 – Program Administration / Community Engagement

1. Project Implementation: Cooperative Agreement Oversight includes program and financial management to ensure compliance with grant requirements; oversee data input to EPA’s ACRES database; attend brownfield-related training and conferences; and submit quarterly, annual, and final performance reports. Community Engagement includes coordinating and conducting meetings and developing materials. Grant-funded direct costs: Travel expenses (registration, airfare, lodging, and meals), supplies, and contractual costs for assistance with reporting and maintaining interactions with stakeholders. Non-EPA funded activities: In-kind staff oversight for administration, monitoring, reporting, and community engagement activities and attending training conferences.

ii. Anticipated Project Schedule: Procure Qualified Environmental Professional (QEP) (4.a.iii): Q1; ACRES and
### Task 2 – Site Inventory and Prioritization

**i. Project Implementation:** County will prepare a GIS brownfields site inventory and database for sites in the target areas, including priority sites described in Section 1.1. The properties will be compiled, mapped, and characterized, and prioritized by the BRAG and County based on community vision and needs, and a pool of sites will be selected for assessment. No assessments will be conducted prior to confirming eligibility with EPA and DEQ if applicable for petroleum sites using Property Approval Questionnaires (PAQs). **Grant-funded activities:** Contractual costs to update, maintain inventory/database and prepare PAQs. **Non-EPA funded activities:** Staff oversight, site prioritization, and access coordination with property owners.

**ii. Anticipated Project Schedule:** Site inventory and database, prioritization, selection: Q2 – Q3, update monthly; Other activities: Ongoing and as needed.

**iii. Task / Activity Lead:** QEP will prepare/maintain inventory and PAQs with AOR/Management staff oversight, assistance with access coordination and work product review/approval. BRAG will provide input for site selection and prioritization.

**iv. Outputs:** Inventory/Database (1); Prioritization Matrix (1); New and/or updated PAQs (30)

### Task 3 – Environmental Site Assessments (ESAs)

**i. Project Implementation:** Upon receiving eligibility approval and access from property owners, approximately 18 Phase I ESAs will be conducted beginning with priority sites. Time and costs for Phase I ESAs are contingent upon property size, existing improvements, past uses, and extent of known or suspected Recognized Environmental Conditions (RECs). Based on Phase I ESA results, approximately 5 sites will be addressed through Phase II ESAs, which include (a) project work plans, i.e., generic Quality Assurance Project Plan (QAPP), site-specific Health and Safety Plans (HASPs), and Sampling and Analysis Plans (SAPs); (b) soil and groundwater sampling; (c) lab analyses and data validation; and (d) summary reports with recommendations for further action, if warranted. **Grant-funded activities:** Contractual costs for assessments, work plans, and reports. **Non-EPA funded activities:** In-kind staff oversight, coordination with property owners, and review of work products prior to submittal to EPA.

**ii. Anticipated Project Schedule:** Phase I ESAs: Q3 – Q11 (after creating inventory database and priority list); Phase II ESAs: Q3 – Q11 (following review of Phase I’s and priority list)

**iii. Task / Activity Lead:** QEP with AOR oversight, assistance with property owner coordination and community input, and review/approval of work products.

**iv. Outputs:** Phase I ESA Reports (18); Phase II ESA Reports (5); Phase II ESA Planning Documents (11 Total): Generic QAPP (1), HASPs (5) and SAPs (5)

### Task 4 – Preliminary Planning for Remediation and/or Redevelopment

**i. Project Implementation:** For some sites addressed through Phase II ESAs, preliminary remediation plans (Analyses of Brownfields Cleanup Alternatives or ABCAs) and associated cost estimates will be prepared to review alternatives for further environmental investigation and/or remediation, if warranted. Staff and QEP will also work with stakeholders to conduct preliminary redevelopment planning for selected target areas and/or sites to explore best reuse and economic potential. This may include reuse plans, marketing/feasibility studies, master plans, infrastructure evaluations, and conceptual development plans. **Grant-funded activities:** QEP costs for remediation and redevelopment plans. **Non-EPA funded activities:** Staff oversight, coordination with property owners and community partners to prepare plans and review/approve work products.

**ii. Anticipated Schedule:** Q3 – Q11

**iii. Task / Activity Lead:** QEP with AOR oversight, assistance with property owner coordination and community input, and review/approval of work products.

**iv. Outputs:** Site-Specific ABCAs (2); Site-Specific Redevelopment Plans / Studies for priority sites (4); Area-Wide Revitalization Plans / Studies for target areas (2)

### 3.b. Cost Estimates
The **Project Budget Table** below provides direct costs to the defined tasks and cost types.

<table>
<thead>
<tr>
<th>Budget Categories</th>
<th>Task 1 Oversight / Community Engagement</th>
<th>Task 2 Site Inventory / Prioritization</th>
<th>Task 3 Environmental Site Assessments</th>
<th>Task 4 Remediation / Redevelopment Planning</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Costs</td>
<td>$5,500</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$5,500</td>
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<tr>
<td>Travel</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Supplies</td>
<td>$1,500</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contractual</td>
<td>$21,600</td>
<td>$19,400</td>
<td>$302,000</td>
<td>$150,000</td>
<td>$493,000</td>
</tr>
<tr>
<td>TOTAL BUDGET</td>
<td>$28,600</td>
<td>$19,400</td>
<td>$302,000</td>
<td>$150,000</td>
<td>$500,000</td>
</tr>
</tbody>
</table>

3.b.i /3.b.ii Development and Application of Cost Estimates: The table below shows cost estimates for each task, the development of costs based on reasonable and realistic unit costs, and application of costs to task activities. Cost estimates include an allocation of 60% of funds towards site-specific assessments and 30% of funds towards reuse/area-wide planning activities.

**Task 1 – Administration / Community Engagement – $28,600 Direct & Contractual**

(a) Travel – $5,500 Total (Direct Expense) – Attendance of 1 national conference for 1 person and 3 state conferences for 2 people assuming the following unit costs (national/state): Conference registration: $200/$150; Transportation: $700/$200; Hotel: $150 per night for 3 nights/$100 per night for 2 nights; Meals: $70 per day for 4 days/$30 per day for 3 days

(b) Supplies – $1,500 Total (Direct Expense) – Advertisement, printing, supplies and promotional materials for 5 community-wide and/or site-specific events estimated @ $300 per event.

(c) Contractual – $21,600 Total – QEP assistance for reporting / grant administration: $750/quarter ($3,000/year, $9,000 total), and QEP assistance for community engagement activities including development of communication materials: $1,050/quarter ($4,200/year, $12,600 total)

**Task 2 – Site Inventory and Prioritization – $19,400 Contractual**

(a) Develop and maintain a GIS brownfields site inventory mapping / database and site prioritization matrix estimated: $6,750 ($2,250 per community)

(b) Site access coordination assistance, preparation, and submittal of PAQs: $1,050/quarter ($4,200/year, $12,600 total)

**Task 3 – Environmental Site Assessments (ESAs)* – $302,000 Contractual**

(a) Phase I ESAs – Eighteen (18) @ $4,800 average – $86,400 total

(b) Phase II ESAs – Five (5) @ $40,000 average – $200,000 total

(c) Project Work Plans – Eleven (11) plans – $15,600 total, as follows:
   - Generic Quality Assurance Project Plan – 1 @ $4,100
   - Site-Specific Health & Safety Plans (HASPs)** – 5 @ $1,000 average – $5,000 total
   - Site-Specific Sampling & Analysis Plans (SAPs)** – 5 @ $1,300 average – $6,500 total

**Task 4 – Remediation / Redevelopment Plans – $150,000 Total – Contractual**

Based on site conditions following assessment, the County anticipates completing approximately nine (9) planning documents estimated as follows:

(a) Preliminary Site Remediation Plans (ABCAs) – 2 @ $15,000 average – $30,000 total

(b) Site-Specific Redevelopment/Reuse Plans/Studies – 4 @ $15,000 average – $60,000 total

(c) Area-Wide Redevelopment Plans/Studies – 3 @ $20,000 average – $60,000 total

* Unit costs for ESAs are estimates and may change depending on site-specific conditions.

** HASPs and SAPs will be combined into single report submittal.

3.c. Measuring Environmental Results: To maintain steady progress throughout the grant, the QEP will prepare **monthly reports to the County** in compliance with the approved **EPA Cooperative Agreement Work Plan**, which will summarize activities, e.g., milestones achieved, issues encountered, and budget and schedule updates. Progress will be measured by the outputs defined in Section 3.a.iv. and evaluated against the schedule in Section 3.a.ii. and costs defined in Section 3.b.i./b.ii. Significant deviations will be discussed with the EPA Project Officer to develop corrective actions if needed. Updates will be reported upon implementation and completion of each site-related task in **EPA’s ACRES database**, and the County will provide ongoing (quarterly at a minimum) and post-grant information describing outcomes and benefits of the funding, including additional funds leveraged, jobs created, acres ready for redevelopment, and private investment and tax revenue generated by the program.

4. PROGRAMMATIC CAPABILITY AND PAST PERFORMANCE
4.a. Programmatic Capability

4.a.i. / 4.a.ii. / 4.a.iii. Organizational Capacity, Organizational Structure, and Description of Key Staff: The table provides the future brownfield program’s organizational structure and a description of the experience and qualifications of the key staff. Given their education and professional experience, including their current position with the County, the key staff fulfill roles that provide the technical, administrative, and financial capacity to provide oversight, management, and administration the grant. If additional staff or resources are required, the County will seek in-house to fulfill the need.

| AUTHORIZED ORGANIZATION REPRESENTATIVE (AOR): Jenna French, Director of Tourism & Economic Development |
| B.S. Economics, University of Washington; Woodstock Chamber of Commerce Executive Director; Shenandoah County Chamber of Commerce Executive Director |
| ADMINISTRATIVE/PLANNING: Mandy Belyea, Deputy County Administrator |
| M.B.A., Virginia Tech; Director of Finance for Town of Woodstock and Shenandoah County; Deputy of Town Manager of Town of Woodstock |
| Community Development: Lemuel Hancock, Director of Community Development |
| MLA, Virginia Polytechnic Institute; BA, William and Mary History and Government, Former Urban Designer Town of Woodstock |
| FINANCIAL: Angie Schellhammer, Director of Finance |
| B.S., Business Administration, Shenandoah University; Nearly 20 years in accounting with the City of Winchester and Frederick County Public Schools |
| TECHNICAL: Brenna Menefee, Planning and Zoning Code Specialist |
| AAS, General Studies, Lord Fairfax Community College; Shenandoah County Permit Technician |

4.a.iv Acquiring Additional Resources: The County will rely on a Qualified Environmental Professional (QEP) contractor with appropriate expertise and resources to carry out the technical aspects of its Brownfields Redevelopment Program. For contractor selection and procurement, The County follows competitive negotiation procedures required for all public bodies in the state to obtain professional services at reasonable cost. All procurement procedures will be conducted in compliance with 40 CFR 31.36 and the VA public procurement procedures for Qualifications Based Selection (QBS). Beginning with advertisement of a request for qualifications and proposals for professional services, followed by interviews with top candidates if needed, staff will score applicants, select, and negotiate a contract with a qualified candidate. Applicable EPA solicitation clauses will be incorporated into Shenandoah’s solicitation and final contract executed with the selected contractor.

4.b. Past Performance and Accomplishments

4.b.i. Shenandoah Has not Received an EPA Brownfields Grant but Has Received Other Federal or Non-Federal Assistance Agreements

(1) The County has successfully taken the lead in 20+ awards in the past 10+ years that benefitted its communities. A recent example is a Community Development Block Grant for COVID-19 recovery (2020, $550,000). The County has also won and successfully managed multiple grants from the Virginia Tourism Corporation Marketing Leverage Program, which includes marketing efforts to promote the County to outside visitors (2021, $20,000 and 2019, $50,000) and for the Spirits Trail (2019, $12,500). These awards indicate the County has a proven track record to successfully manage state and federal funds.

(2) Compliance with Grant Requirements, Shenandoah has managed both federally and non-federally funded projects and is fully capable of successfully completing all phases of work under this cooperative agreement. Shenandoah is familiar with and understands the necessity of developing work plans, creating and maintaining schedules, and assuring adherence to project terms and conditions. For all projects identified above, all applicable site information, required administrative reports, design documentation, and final inspections were submitted in a timely manner and approved by funding and regulatory agencies with purview. Final project closeout was accomplished for these projects in compliance with program requirements.
1. ** Applicant Eligibility **
Shenandoah County, Virginia (County) was formed in 1772 as a political subdivision of the Commonwealth of Virginia and is considered a *General-Purpose Unit of Local Government*.

2. ** Community Involvement **
Recognizing the importance of community involvement in the brownfields prioritization and redevelopment process, the County will engage the community partners to participate in the **Shenandoah Brownfields Redevelopment Advisory Group (Shenandoah BRAG)**. The BRAG will consist of elected officials, local businesses, and community organizations with outreach capabilities throughout the County. The BRAG will be used to solicit community involvement and support across the County and advance the brownfields program and the target areas’ goals during their monthly meetings. The target areas will be given a voice through their representatives in the Shenandoah Industrial Development Authority. The BRAG will act as brownfields ambassadors, advisors and steering committee during the project, bringing their community vision and expertise in health care, education, business, construction, and real estate. The County will involve representatives of the neighborhoods most impacted by proposed redevelopment projects. Outreach efforts will be conducted in the target areas and will include educational seminars, workshops, and design charrettes intended to garner input on existing assets and redevelopment needs in the target areas. The County and target communities have successfully used virtual meeting platforms such as Zoom to conduct meetings and disseminate information. Citizens can actively participate in the virtual meetings at their convenience, which are useful alternatives given COVID-19 and for schedule flexibility. For example, information on the brownfields grant application was presented to the Shenandoah Board of Supervisor and is publicly available to all citizens through the meeting recording and meeting minutes available on the Shenandoah County webpage. Core stakeholder groups will be formed in each target area to include community organizations, property owners, and local staff. Flyers will be distributed/posted in the communities and e-mailed to appropriate parties, and all gatherings will be publicly advertised via local print and electronic media. This avenue of communication will be beneficial for those communities where internet or phone access is limited. Because of the significant population of Hispanics in the County, all forms of media and meetings will be offered with bilingual options to better reach and serve all communities.

3. ** Named Contractors and Subrecipients **
Not applicable: The applicant has not identified a procurement contractor nor subrecipient to conduct work proposed in this application.

4. ** Expenditure of Assessment Grant Funds **
Not Applicable: The applicant affirms it does not have an active EPA Brownfields Assessment Grant.